switching a time slot allocated to the on-board mobile station to continuously communicate with the on-board mobile station over the radio zones.

4. (Amended) An automobile communications method between an on-board mobile station and a fixed station system in a plurality of radio zones which are consecutively arranged along a road, comprising:

providing each of the radio zones with a plurality of predetermined communication frequencies;

switching a communication frequency used in each of the radio zones using a time division scheme;

controlling a communication frequency used in each of the radio zones using a time division scheme such that different time slots are allocated for communications at a same communication frequency in adjoining radio zones; and

continuously communicating with the on-board mobile station at a same communication frequency over the radio zones.

13. (Amended) An automobile communications system comprising:

an on-board mobile station movable on a road;

a plurality of fixed stations forming a plurality of radio zones consecutively arranged on the road, respectively, wherein the fixed stations are communicable with the on-board mobile station using one of a plurality of predetermined communication frequencies; and

a control station controlling communication frequencies used by the plurality of fixed stations at a predetermined timing in such a way as not to permit simultaneous transmission at a same communication frequency in adjoining radio zones,

the plurality of fixed stations performing continuous communication with the on-board mobile station by allocating different time slots to communications at a same frequency in adjoining radio zones and switching a time slot allocated to the on-board mobile station and by switching a communication frequency used in each of the radio zones using a time division scheme.

Please add new claims 37 - 41 as follows:

- - 37. (Newly Added) The method of claim 1, wherein the plurality of predetermined communication frequencies in each radio zone are generated from a single reference frequency. - -

- - 38. (Newly Added) The method of claim 4, wherein the plurality of predetermined communication frequencies in each radio zone are generated from a single reference frequency. - -

- - 39. (Newly Added) The system of claim 13, wherein the plurality of predetermined communication frequencies in each radio zone are generated from a single reference frequency. - -

- - 40. (Newly Added) An automobile communications method between an on-board mobile station and a fixed station system in a plurality of radio zones which are consecutively arranged along a road, comprising:

providing each of the radio zones with a plurality of predetermined communication frequencies;

controlling a communication frequency used in each of the radio zones using a time division scheme such that simultaneous transmission at a same communication frequency is not permitted in adjoining radio zones and different time slots are allocated for communications at a same communication frequency in adjoining radio zones; and

continuously communicating with the on-board mobile station at a same communication frequency over the radio zones,

wherein a predetermined number N (N is an integer equal to or greater than 2) of time slots are determined in one period in each of the radio zones, wherein one time slot is assigned to a single on-board mobile station and M (M is an integer equal to or greater than 2) predetermined communication frequencies are sequentially switched from one to another at a timing of every N/M time slot.- -

- - 41. (Newly Added) The automobile communication method according to claim 40, wherein the time slot allocated to the on-board mobile station is switched in such a way that the on-board mobile station uses a same communication frequency over the plurality of radio zones.- -